

WEST Search History

DATE: Thursday, September 19, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR= YES; OP OR</i>			
L6	sampl\$4 near4 crystal\$8 near4 precipitat\$4	107	L6
L5	L4 near4 crystal\$8	66	L5
L4	lumen	44433	L4
L3	L1 same crystal\$8	1	L3
L2	L1 near4 crystal\$8	0	L2
L1	microvolume	233	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 11:08:24 ON 19 SEP 2002)

FILE 'CAPLUS' ENTERED AT 11:08:40 ON 19 SEP 2002

L1 17490 S LUMEN
L2 10 S L1 (2A) CRYSTAL?
L3 1 S MICROVOLUME (2A) CRYSTAL?
L4 0 S MICRO (1W) VOLUME
L5 34 S MICRO (1W) VOLUME
L6 1 S L5 AND CRYSTAL?

FILE 'STNGUIDE' ENTERED AT 11:17:42 ON 19 SEP 2002

FILE 'INSPEC' ENTERED AT 11:20:21 ON 19 SEP 2002

L7 1 S L2
L8 34 S L3 OR L5
L9 6 S L3 OR L6

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
 AN 1998:109901 CAPLUS
 DN 128:228209
 TI **Micro-volume** dynamic light scattering; and simultaneous
 video microscopic observation for screening of protein **crystal**
 growth
 AU Wessel, Th.; Ricka, J.
 OS Institute of Applied Physics, University of Bern, Bern, CH-3012, Switz.
 SO Proceedings of SPIE-The International Society for Optical Engineering
 (1998), 3199(Biomedical Systems and Technologies II), 299-305
 CODEN: PSISDG; ISSN: 0277-786X
 PB SPIE-The International Society for Optical Engineering
 DT Journal
 LA English
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 0
 AB Dynamic light scattering (DLS), video microscopic and ultra-microscopic
 observation were simultaneously employed for screening of protein
crystal growth in the vapor diffusion regime. The setup,
 consisting of a modified microscope equipped with a laser sheet
 (darkfield) illumination for ultra-microscopy, allows the visualization of
 clusters in the nanometer range as well as of macroscopic **crystals**
 parallel with the DLS measurements. The results of microscopic and
 ultra-microscopic observations, the DLS autocorrelation functions and the
 resulting relaxation time distributions for the std. protein lysozyme are
 presented. The special conditions for dynamic light scattering
 measurements in the pre and post crystn. phase with samples situated in
 small droplets and covered by a std. crystn. plate are discussed.
 ST dynamic light scattering video microscopy; protein **crystal**
 growth
 IT Light scattering
 (dynamic; micro-vol. dynamic light scattering and simultaneous video
 microscopic observation for screening of protein **crystal**
 growth)
 IT **Crystal** growth
 Optical fibers
 (micro-vol. dynamic light scattering and simultaneous video microscopic
 observation for screening of protein **crystal** growth)
 IT Proteins, general, properties
 EL: FEP (Physical, engineering or chemical process); FRP (Properties);
 PECO (Process)
 (micro-vol. dynamic light scattering and simultaneous video microscopic
 observation for screening of protein **crystal** growth)
 IT Microscopy
 (video; micro-vol. dynamic light scattering and simultaneous video
 microscopic observation for screening of protein **crystal**
 growth)

AN 1971:245744 INSPEC
TI Electron-probe microanalysis.
AU Hornsveld, E.M.
SC Atoomenergie en haar Toepassingen (Dec. 1970) vol.12, no.12, p.321-8
CODEN: AETPAY ISSN: 0004-7228

DT Journal
TC Practical
CY Netherlands
LA Dutch
AB

Describes the principles of electron-probe microanalysis and gives details of the commercial Cameca machine and its use. The equipment is designed for the identification and estimation of the components in a selected

micro-volume at the surface of a solid specimen from electron micrographs and by the analysis of the characteristic X-rays emitted when the surface is bombarded by an electron micro-beam. The beam has a diameter of 0.1-1 μm , and the equipment can deal with atomic numbers down to 5 (boron), and can detect about 100 p.p.m. in a volume of 10 cubic μm , the smallest amount detectable being 10-14 g.

Identification is via a **crystal** spectrometer or a scanning counter. Examples are given of the application of the technique to the examination of UB_4 particles in a UO_2 matrix, of an Al_2O_3 - UO_2 eutectic mixed with an excess of Al_2O_3 ; of Incoloy-800; and of coated particles.

CC A8280 Chemical analysis and related physical methods of analysis
CT ELECTRON PROBE ANALYSIS
ST electron probe microanalysis; Cameca machine; electron micrographs
ET B^*U ; UB_4 ; U cp; cp; B cp; O^*U ; UO_2 ; O cp; $\text{Al}^*\text{O}^*\text{U}$; Al sy 3; sy 3; O sy 3; U sy 3; Al_2O_3 ; Al cp; Al_2O_3 - UO_2 ; Al^*O